**CLAIMS**

1. A device (1) for 2D topographic map display for aircraft, extracting from a topographic database a map formed from the projection on the horizontal of a stack of terrain strata of the region overflown, corresponding to terrain sections with mainly horizontal profile, characterized in that the terrain sections with mainly horizontal profile (71, 72, 73, 81, 82, 83) are referenced with respect to an absolute altitude that is greater than that of the highest surrounding relief, which absolute altitude is termed the safety altitude $MSA_{EDGE}$ (24).

2. The device as claimed in claim 1, characterized in that, when the topographic map is extracted from a topographic database (3) storing the altitudes of a mesh of points of a zone of the terrestrial surface enclosing the region overflown, the safety altitude $MSA_{EDGE}$ (24) is deduced from the minimum local safety altitudes assigned to the points of the mesh of the topographic database (3).

3. The device as claimed in claim 2, characterized in that the safety altitude $MSA_{EDGE}$ (24) is deduced from the minimum local safety altitudes assigned to the points of the mesh of the topographic database belonging, in the region overflown, to a so-called emergency descent zone (32), related to the current position (20) of the aircraft and containing probable trajectories predicted for an aircraft following a maximum imposed descent slope $FPA_{EDGE}$.

4. The device as claimed in claim 3, characterized in that the value of the safety altitude $MSA_{EDGE}$ (24) is extracted from the distribution, as a function of their values, of the minimum local safety altitudes assigned to the points of the mesh of the topographic database

(3) belonging, in the region overflown, to the emergency descent zone (32) and corresponds to the maximum value $MAS_{EDGE}$value of the minimum local safety altitudes appearing in this distribution after clipping of a certain percentage $N_{EDGE}$% of the largest values of minimum local altitudes that it contains.

5. The device as claimed in claim 1, characterized in that the terrain strata represented (81, 82, 83) correspond to terrain sections along horizontal profiles.

6. The device as claimed in claim 1, characterized in that, when the aircraft is at an altitude greater than the safety altitude $MSA_{EDGE}$ (24) with respect to which the terrain strata represented are referenced, the terrain strata represented (71, 72, 73) correspond to terrain sections along mainly horizontal elbowed profiles reducing, by vertical translation, to a broken line starting with a first straight line segment (23) with negative slope going from the current position (20) of the aircraft up to the level of the safety altitude $MSA_{EDGE}$ (24) and continuing as a second horizontal straight line segment (24).

7. The device as claimed in claim 6, characterized in that the negative slope angle of the first straight line segment is taken equal to the most negative slope angle $FPA_{EDGE}$ from among the angle of the current slope followed by the aircraft, the maximum descent slope angle permitted for the aircraft and the arc tangent of the ratio between the ground speed of the aircraft and a maximum descent speed permitted for the aircraft.

8. The device as claimed in claim 1, characterized in that, when the aircraft is below the safety altitude $MSA_{EDGE}$ (24) with respect to which the terrain strata represented are referenced, the terrain strata represented (81, 82, 83) correspond to horizontal

sections.

9. The device as claimed in claim 1, characterized in that the colors and/or textures associated with the levels of terrain strata (71, 72, 73, 81, 82, 83) in a map displayed correspond to the same risk scale as that associated with the colors and/or textures of a visual alarm map originating from a ground proximity warning system (4).

10. The device as claimed in claim 1, characterized in that the colors associated with the terrain strata represented, situated below the altitude of the aircraft (71, 72, 73), belong to the green interval.

11. The device as claimed in claim 1, characterized in that the colors associated with the terrain strata represented, situated at levels close to the current altitude of the aircraft, belong to the yellow interval.

12. The device as claimed in claim 1, characterized in that the color associated with the terrain strata represented, situated above the altitude of the aircraft is red.

13. The device as claimed in claim 1, characterized in that, when the aircraft is equipped with a ground proximity warning system (4) producing visual alarm maps pinpointing threatening reliefs or obstacles on the ground, the colors and/or textures associated with the levels of terrain strata represented in a relief map displayed by said device comply with the same risk scale as those of the visual alarm maps and in that it comprises a superposition circuit superimposing the visual alarm maps on the map of the relief which appears as background around threatening reliefs and obstacles on the ground.

14. The device as claimed in claim 1, characterized in

that, when the aircraft is equipped with a ground proximity warning system (4) producing visual alert and alarm maps pinpointing threatening reliefs and obstacles on the ground and distinguishing them by different colors and/or textures as a function of the short- or medium-term character of the threat that they pose, the color and/or texture associated, in an alarm and alert map, with a relief or obstacle on the ground giving rise to a short-term threat are borrowed for a terrain stratum level represented situated at an altitude greater than that of the aircraft and the color and/or the texture associated with a relief or an obstacle on the ground giving rise to a medium-term threat are borrowed for a terrain stratum level represented situated at the altitude of the aircraft.